1,4-Dichlorobenzene (1,4-ｼﾞｸﾛﾛﾍﾞﾝｾﾞﾝ)

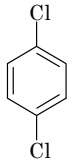
Experimental Data (Short treatments)

Chemical Name ; 1,4-Dichlorobenzene

Synoym ; *p*-Dichlorobenzene

Molecular Weight ; 147.00
Melting Point ; 54 ℃ [CHCD]
Boiling Point ; 174 ℃ [CHCD]
Flashing Point ; 65.6℃(c.c.)[Merck]
Molecular Formula ; $C_6H_4Cl_2$

Chemical Structure ;



CAS No. ; 106-46-7
METI No. ; (3)-41
MHLW No. ; －
Specified Chemical Substances ; －

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.
Lot No. ; GE01
Purity ; 99.9%

Vehicle ; Dehydrated DMSO

Treatment Time (h)	S9 mix	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
			No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
				ctb	cte	csb	cse								
6-18	－	[DMSO] (1%)	200	0.5	0.5	0	0	0	1	0	100	202	1	0	1
		0.08	200	0	0	0	0	0	0	0	102	200	0	0	0
		0.10	200	0	0	0	0	0	0	0	86	200	0	0	0
		0.12	200	0	0	0	0	0	0	0	67	200	0	0	0
		0.14†	200	0	0	0	0	0	0	0.5	7	200	0	0	0
		0.16†	TOX								2	TOX			
		[MMC] (0.00012)	200	16	59	0	0	0	65.5	0	－	201	0.5	0	0.5
6-18	＋	[DMSO] (1%)	200	0.5	0.5	0	0	0	1	0.5	100	202	1	0	1
		0.08	200	0.5	1	0	0	0	1.5	0	88	202	1	0	1
		0.10	200	0	0	0	0	0	0	0.5	85	200	0	0	0
		0.12	200	0	1	0	0	0	1	0	60	204	2	0	2
		0.14†	200	0	0	0	0	0	0	0	37	201	0.5	0	0.5
		0.16†	TOX								2	TOX			
		[B[a]P] (0.015)	200	10.5	55	0	0	0	57.5	1	－	200	0	0	0

Judgement for
Chromosomal Aberration in CHL/IU ; Negative

IARC Evaluation ; Group 2B

※ Test conditions: S9mix ; 5%, Treatment time ; 6h, Recovery time ; 18h
The culture vessel was sealed and cultured rotating after adding the test chemical.
† The precipitation of test chemical was observed in the culture medium.

Experimental Data without Metabolic Activation (Continuous treatments)

Treatment Time (h)	Concentration (mg/ml)	Cell with Structural Chromosome Aberration (%)							Gap (%)	Cell Growth Rate (%)	Cell with Numerical Chromosome Aberration(%)			
		No. of Metaphase	Chromatid		Chromosome		Others	Total			No. of Metaphase	Poly-ploid	Others	Total
			ctb	cte	csb	cse								
24-0	[DMSO] (1%)	200	0.5	0	0	0	0	0.5	0.5	100	200	0	0	0
	0.04	200	0.5	0	0	0	0	0.5	0	107	201	0.5	0	0.5
	0.06	200	0	0	0	0	0	0	0	86	201	0.5	0	0.5
	0.08	200	0.5	0	0	0	0	0.5	0	83	200	0	0	0
	0.10	200	0	0	0	0	0	0	0	77	202	1	0	1
	0.12	200	1	0.5	0	0	0	1.5	0	60	201	0	0.5	0.5
	0.14†	TOX								3	TOX			
	[MMC] (0.00004)	200	4	26.5	0	0	0	29.5	1	—	200	0	0	0
48-0	[DMSO] (1%)	200	1	0	0	0	0	1	0.5	100	200	0	0	0
	0.04	200	0.5	0	0	0	0	0.5	0	101	200	0	0	0
	0.06	200	0	0.5	0	0	0	0.5	0	95	202	1	0	1
	0.08	200	0	0	0	0	0	0	0	82	202	1	0	1
	0.10	200	0	0	0	0	0	0	0	66	201	0.5	0	0.5
	0.12	200	0	0	0	0	0	0	0.5	57	201	0.5	0	0.5
	0.14†	TOX								1	TOX			
	[MMC] (0.00004)	200	5	27.5	0	0.5	0	33	0	—	200	0	0	0

※ Test conditions: Treatment time ; 24h or 48h, Recovery time ; 0h
The culture vessel was sealed and cultured rotating after adding the test chemical.

† The precipitation of test chemical was observed in the culture medium.